Claims

1. (Previously Presented) An isolated polypeptide comprising:

(a) an amino acid sequence set forth as SEQ ID NO: 1; or

(b) 8 to 11 contiguous amino acids of SEQ ID NO: 1, wherein the polypeptide binds major histocompatibility complex (MHC) I.

2. (Previously Presented) An immunogenic composition comprising the isolated polypeptide of claim 53, and a pharmaceutically acceptable carrier.

3. (Canceled)

4. (Previously Presented) An immunogenic composition comprising the isolated polypeptide of claim 54, and a pharmaceutically acceptable carrier.

5. (Canceled)

6. (Previously Presented) The isolated polypeptide of claim 54, wherein the isolated polypeptide is conjugated to a lipid.

7. (Previously Presented) The immunogenic composition of claim 2, further comprising two or more of a stabilizing detergent, a micelle-forming agent, and an oil.

8. (Previously Presented) The immunogenic composition of claim 4, further comprising two or more of a stabilizing detergent, a micelle-forming agent, and an oil.

9. (Withdrawn) An isolated nucleic acid encoding the polypeptide of claim 1.

10. (Withdrawn) An immunogenic composition comprising the isolated nucleic acid of claim 9, loaded on a gold microsphere.

11. (Withdrawn) The isolated nucleic acid of claim 9, operably linked to a heterologous promoter.

12. (Withdrawn) An immunogenic composition comprising

a therapeutically effective amount of an isolated nucleic acid encoding the polypeptide of claim 1, wherein the nucleic acid encodes a polypeptide consisting essentially of eight to eleven contiguous amino acids of an amino acid sequence set forth as SEQ ID NO: 1, wherein the polypeptide binds major histocompatibility complex (MHC) I; and

a pharmaceutically acceptable carrier.

13.-15. (Canceled)

16. (Withdrawn) A method for inhibiting the growth of a malignant cell expressing PAGE-4 in a mammal with a malignancy comprising PAGE-4-expressing cells, the method comprising,

(a) obtaining antigen presenting cells (APCs) and cytotoxic T lymphocytes (CTLs) or CTL precursor cells from the mammal;

(b) transducing the APCs with the nucleic acid encoding the polypeptide of claim 1;

(c) culturing the APC with the CTLs or CTL precursors, thus activating the CTLs or CTL precursors to recognize a PAGE-4-expressing cell; and

(d) introducing the activated CTLs or CTL precursors into the mammal, thereby inhibiting the growth of the malignant cell.

17.-52. (Canceled).

53. (Previously Presented) The isolated polypeptide of claim 1, comprising an amino acid sequence set forth as SEQ ID NO: 1.

54. (Previously Presented) An isolated polypeptide consisting of 8 to 11 contiguous amino acids of SEQ ID NO: 1, wherein the polypeptide binds major histocompatibility complex (MHC) I .

55. (Previously Presented) The isolated polypeptide of claim 54, wherein the polypeptide is 9 to 10 amino acids in length.

56. (Previously Presented) The isolated polypeptide of claim 53, wherein the polypeptide binds HLA-A1, HLA-A2.1, HLA-A3.2, HLA-A4.1 or HLA-A11.2.

57. (Previously Presented) The isolated polypeptide of claim 54, conjugated to a lipid.

58. (Withdrawn) An isolated polynucleotide encoding the polypeptide of claim 52.

59. (Withdrawn) The isolated polynucleotide of claim 57, operably linked to a promoter.

60. (Withdrawn) A vector comprising the isolated polynucleotide of claim 58.